

## **RAW SEQUENCE LISTING**

**The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) no errors detected.**

Application Serial Number: 10/552,061  
Source: PG/10  
Date Processed by STIC: 10/17/05

***ENTERED***



PCT

**RAW SEQUENCE LISTING**  
**PATENT APPLICATION: US/10/552,061**

**DATE: 10/17/2005**  
**TIME: 10:57:43**

**Input Set : A:\5.1277.1.txt**  
**Output Set: N:\CRF4\10172005\J552061.raw**

```

3 <110> APPLICANT: KYOWA HAKKO KOGYO CO., LTD.
5 <120> TITLE OF INVENTION: Nerve Regenerating Drug
7 <130> FILE REFERENCE: 5.1277
C--> 9 <140> CURRENT APPLICATION NUMBER: US/10/552,061
C--> 10 <141> CURRENT FILING DATE: 2005-10-04
12 <150> PRIOR APPLICATION NUMBER: PCT/JP04/005503
13 <151> PRIOR FILING DATE: 2004-04-16
15 <150> PRIOR APPLICATION NUMBER: JP2003-114579
16 <151> PRIOR FILING DATE: 2003-04-18
18 <160> NUMBER OF SEQ ID NOS: 17
20 <170> SOFTWARE: PatentIn Ver. 2.1
22 <210> SEQ ID NO: 1
23 <211> LENGTH: 420
24 <212> TYPE: PRT
25 <213> ORGANISM: Homo sapiens
27 <400> SEQUENCE: 1
28 Met Ser Gly Arg Pro Arg Thr Thr Ser Phe Ala Glu Ser Cys Lys Pro
29   1           5           10          15
31 Val Gln Gln Pro Ser Ala Phe Gly Ser Met Lys Val Ser Arg Asp Lys
32       20          25          30
34 Asp Gly Ser Lys Val Thr Thr Val Val Ala Thr Pro Gly Gln Gly Pro
35       35          40          45
37 Asp Arg Pro Gln Glu Val Ser Tyr Thr Asp Thr Lys Val Ile Gly Asn
38       50          55          60
40 Gly Ser Phe Gly Val Val Tyr Gln Ala Lys Leu Cys Asp Ser Gly Glu
41       65          70          75          80
43 Leu Val Ala Ile Lys Lys Val Leu Gln Asp Lys Arg Phe Lys Asn Arg
44       85          90          95
46 Glu Leu Gln Ile Met Arg Lys Leu Asp His Cys Asn Ile Val Arg Leu
47       100         105         110
49 Arg Tyr Phe Phe Tyr Ser Ser Gly Glu Lys Lys Asp Glu Val Tyr Leu
50       115         120         125
52 Asn Leu Val Leu Asp Tyr Val Pro Glu Thr Val Tyr Arg Val Ala Arg
53       130         135         140
55 His Tyr Ser Arg Ala Lys Gln Thr Leu Pro Val Ile Tyr Val Lys Leu
56       145         150         155         160
58 Tyr Met Tyr Gln Leu Phe Arg Ser Leu Ala Tyr Ile His Ser Phe Gly
59       165         170         175
61 Ile Cys His Arg Asp Ile Lys Pro Gln Asn Leu Leu Asp Pro Asp
62       180         185         190
64 Thr Ala Val Leu Lys Leu Cys Asp Phe Gly Ser Ala Lys Gln Leu Val
65       195         200         205
67 Arg Gly Glu Pro Asn Val Ser Tyr Ile Cys Ser Arg Tyr Tyr Arg Ala

```

RAW SEQUENCE LISTING  
PATENT APPLICATION: US/10/552,061

DATE: 10/17/2005  
TIME: 10:57:43

Input Set : A:\5.1277.1.txt  
Output Set: N:\CRF4\10172005\J552061.raw

68	210	215	220	
70	Pro Glu Leu Ile Phe Gly Ala Thr Asp Tyr Thr Ser Ser Ile Asp Val			
71	225	230	235	240
73	Trp Ser Ala Gly Cys Val Leu Ala Glu Leu Leu Leu Gly Gln Pro Ile			
74	245	250	255	
76	Phe Pro Gly Asp Ser Gly Val Asp Gln Leu Val Glu Ile Ile Lys Val			
77	260	265	270	
79	Leu Gly Thr Pro Thr Arg Glu Gln Ile Arg Glu Met Asn Pro Asn Tyr			
80	275	280	285	
82	Thr Glu Phe Lys Phe Pro Gln Ile Lys Ala His Pro Trp Thr Lys Val			
83	290	295	300	
85	Phe Arg Pro Arg Thr Pro Pro Glu Ala Ile Ala Leu Cys Ser Arg Leu			
86	305	310	315	320
88	Leu Glu Tyr Thr Pro Thr Ala Arg Leu Thr Pro Leu Glu Ala Cys Ala			
89	325	330	335	
91	His Ser Phe Phe Asp Glu Leu Arg Asp Pro Asn Val Lys His Pro Asn			
92	340	345	350	
94	Gly Arg Asp Thr Pro Ala Leu Phe Asn Phe Thr Thr Gln Glu Leu Ser			
95	355	360	365	
97	Ser Asn Pro Pro Leu Ala Thr Ile Leu Ile Pro Pro His Ala Arg Ile			
98	370	375	380	
100	Gln Ala Ala Ala Ser Thr Pro Thr Asn Ala Thr Ala Ala Ser Asp Ala			
101	385	390	395	400
103	Asn Thr Gly Asp Arg Gly Gln Thr Asn Asn Ala Ala Ser Ala Ser Ala			
104	405	410	415	
106	Ser Asn Ser Thr			
107	420			
109	<210> SEQ ID NO: 2			
110	<211> LENGTH: 1260			
111	<212> TYPE: DNA			
112	<213> ORGANISM: Homo sapiens			
114	<400> SEQUENCE: 2			
115	atg tca ggg cgg ccc aga acc acc tcc ttt gcg gag agc tgc aag ccg	48		
116	Met Ser Gly Arg Pro Arg Thr Thr Ser Phe Ala Glu Ser Cys Lys Pro			
117	1	5	10	15
119	gtg cag cag cct tca gct ttt ggc agc atg aaa gtt agc aga gac aag	96		
120	Val Gln Gln Pro Ser Ala Phe Gly Ser Met Lys Val Ser Arg Asp Lys			
121	20	25	,30	
123	gac ggc agc aag gtg aca aca gtg gtg gca act cct ggg cag ggt cca	144		
124	Asp Gly Ser Lys Val Thr Thr Val Val Ala Thr Pro Gly Gln Gly Pro			
125	35	40	45	
127	gac agg cca caa gaa gtc agc tat aca gac act aaa gtg att gga aat	192		
128	Asp Arg Pro Gln Glu Val Ser Tyr Thr Asp Thr Lys Val Ile Gly Asn			
129	50	55	60	
131	gga tca ttt ggt gtg gta tat caa gcc aaa ctt tgt gat tca gga gaa	240		
132	Gly Ser Phe Gly Val Val Tyr Gln Ala Lys Leu Cys Asp Ser Gly Glu			
133	65	70	75	80
135	ctg gtc gcc atc aag aaa gta ttg cag gac aag aga ttt aag aat cga	288		
136	Leu Val Ala Ile Lys Lys Val Leu Gln Asp Lys Arg Phe Lys Asn Arg			

**RAW SEQUENCE LISTING**  
**PATENT APPLICATION: US/10/552,061**

**DATE: 10/17/2005**  
**TIME: 10:57:43**

**Input Set : A:\5.1277.1.txt**  
**Output Set: N:\CRF4\10172005\J552061.raw**

137	85	90	95	
139	gag ctc cag atc atg aga aag cta gat cac tgt aac ata gtc cga ttg			336
140	Glu Leu Gln Ile Met Arg Lys Leu Asp His Cys Asn Ile Val Arg Leu			
141	100	105	110	
143	cgt tat ttc ttc tac tcc agt ggt gag aag aaa gat gag gtc tat ctt			384
144	Arg Tyr Phe Phe Tyr Ser Ser Gly Glu Lys Lys Asp Glu Val Tyr Leu			
145	115	120	125	
147	aat ctg gtg ctg gac tat gtt ccg gaa aca gta tac aga gtt gcc aga			432
148	Asn Leu Val Leu Asp Tyr Val Pro Glu Thr Val Tyr Arg Val Ala Arg			
149	130	135	140	
151	cac tat agt cga gcc aaa cag acg ctc cct gtg att tat gtc aag ttg			480
152	His Tyr Ser Arg Ala Lys Gln Thr Leu Pro Val Ile Tyr Val Lys Leu			
153	145	150	155	160
155	tat atg tat cag ctg ttc cga agt tta gcc tat atc cat tcc ttt gga			528
156	Tyr Met Tyr Gln Leu Phe Arg Ser Leu Ala Tyr Ile His Ser Phe Gly			
157	165	170	175	
159	atc tgc cat cgg gat att aaa ccg cag aac ctc ttg ttg gat cct gat			576
160	Ile Cys His Arg Asp Ile Lys Pro Gln Asn Leu Leu Asp Pro Asp			
161	180	185	190	
163	act gct gta tta aaa ctc tgt gac ttt gga agt gca aag cag ctg gtc			624
164	Thr Ala Val Leu Lys Leu Cys Asp Phe Gly Ser Ala Lys Gln Leu Val			
165	195	200	205	
167	cga gga gaa ccc aat gtt tcg tat atc tgt tct ccg tac tat agg gca			672
168	Arg Gly Glu Pro Asn Val Ser Tyr Ile Cys Ser Arg Tyr Tyr Arg Ala			
169	210	215	220	
171	cca gag ttg atc ttt gga gcc act gat tat acc tct agt ata gat gta			720
172	Pro Glu Leu Ile Phe Gly Ala Thr Asp Tyr Thr Ser Ser Ile Asp Val			
173	225	230	235	240
175	tgg tct gct ggc tgt gtc ttg gct gag ctg tta cta gga caa cca ata			768
176	Trp Ser Ala Gly Cys Val Leu Ala Glu Leu Leu Leu Gly Gln Pro Ile			
177	245	250	255	
179	ttt cca ggg gat agt ggt gtg gat cag ttg gta gaa ata atc aag gtc			816
180	Phe Pro Gly Asp Ser Gly Val Asp Gln Leu Val Glu Ile Ile Lys Val			
181	260	265	270	
183	ctg gga act cca aca agg gag caa atc aga gaa atg aac cca aac tac			864
184	Leu Gly Thr Pro Thr Arg Glu Gln Ile Arg Glu Met Asn Pro Asn Tyr			
185	275	280	285	
187	aca gaa ttt aaa ttc cct caa att aag gca cat cct tgg act aag gtc			912
188	Thr Glu Phe Lys Phe Pro Gln Ile Lys Ala His Pro Trp Thr Lys Val			
189	290	295	300	
191	tcc cga ccc cga act cca ccg gag gca att gca ctg tgt agc cgt ctg			960
192	Phe Arg Pro Arg Thr Pro Pro Glu Ala Ile Ala Leu Cys Ser Arg Leu			
193	305	310	315	320
195	ctg gag tat aca cca act gcc cga cta aca cca ctg gaa gct tgt gca			1008
196	Leu Glu Tyr Thr Pro Thr Ala Arg Leu Thr Pro Leu Glu Ala Cys Ala			
197	325	330	335	
199	cat tca ttt ttt gat gaa tta ccg gac cca aat gtc aaa cat cca aat			1056
200	His Ser Phe Phe Asp Glu Leu Arg Asp Pro Asn Val Lys His Pro Asn			
201	340	345	350	

RAW SEQUENCE LISTING  
PATENT APPLICATION: US/10/552,061

DATE: 10/17/2005  
TIME: 10:57:43

Input Set : A:\5.1277.1.txt  
Output Set: N:\CRF4\10172005\J552061.raw

203	ggg cga gac aca cct gca ctc ttc aac ttc acc act caa gaa ctg tca	1104
204	Gly Arg Asp Thr Pro Ala Leu Phe Asn Phe Thr Thr Gln Glu Leu Ser	
205	355 360 365	
207	agt aat cca cct ctg gct acc atc ctt att cct cat gct cgg att	1152
208	Ser Asn Pro Pro Leu Ala Thr Ile Leu Ile Pro Pro His Ala Arg Ile	
209	370 375 380	
211	caa gca gct gct tca acc ccc aca aat gcc aca gca gcg tca gat gct	1200
212	Gln Ala Ala Ala Ser Thr Pro Thr Asn Ala Thr Ala Ala Ser Asp Ala	
213	385 390 395 400	
215	aat act gga gac cgt gga cag acc aat aat gct gct tct gca tca gct	1248
216	Asn Thr Gly Asp Arg Gly Gln Thr Asn Asn Ala Ala Ser Ala Ser Ala	
217	405 410 415	
219	tcc aac tcc acc	1260
220	Ser Asn Ser Thr	
221	420	
223	<210> SEQ ID NO: 3	
224	<211> LENGTH: 737	
225	<212> TYPE: PRT	
226	<213> ORGANISM: Homo sapiens	
228	<400> SEQUENCE: 3	
229	Met Pro Leu Asn Arg Thr Leu Ser Met Ser Ser Leu Pro Gly Leu Glu	
230	1 5 10 15	
232	Asp Trp Glu Asp Glu Phe Asp Leu Glu Asn Ala Val Leu Phe Glu Val	
233	20 25 30	
235	Ala Trp Glu Val Ala Asn Lys Val Gly Gly Ile Tyr Thr Val Leu Gln	
236	35 40 45	
238	Thr Lys Ala Lys Val Thr Gly Asp Glu Trp Gly Asp Asn Tyr Phe Leu	
239	50 55 60	
241	Val Gly Pro Tyr Thr Glu Gln Gly Val Arg Thr Gln Val Glu Leu Leu	
242	65 70 75 80	
244	Glu Ala Pro Thr Pro Ala Leu Lys Arg Thr Leu Asp Ser Met Asn Ser	
245	85 90 95	
247	Lys Gly Cys Lys Val Tyr Phe Gly Arg Trp Leu Ile Glu Gly Gly Pro	
248	100 105 110	
250	Leu Val Val Leu Leu Asp Val Gly Ala Ser Ala Trp Ala Leu Glu Arg	
251	115 120 125	
253	Trp Lys Gly Glu Leu Trp Asp Ile Cys Asn Ile Gly Val Pro Trp Tyr	
254	130 135 140	
256	Asp Arg Glu Ala Asn Asp Ala Val Leu Phe Gly Phe Leu Thr Thr Trp	
257	145 150 155 160	
259	Phe Leu Gly Glu Phe Leu Ala Gln Ser Glu Glu Lys Pro His Val Val	
260	165 170 175	
262	Ala His Phe His Glu Trp Leu Ala Gly Val Gly Leu Cys Leu Cys Arg	
263	180 185 190	
265	Ala Arg Arg Leu Pro Val Ala Thr Ile Phe Thr Thr His Ala Thr Leu	
266	195 200 205	
268	Leu Gly Arg Tyr Leu Cys Ala Gly Ala Val Asp Phe Tyr Asn Asn Leu	
269	210 215 220	
271	Glu Asn Phe Asn Val Asp Lys Glu Ala Gly Glu Arg Gln Ile Tyr His	

## RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/552,061

DATE: 10/17/2005

TIME: 10:57:43

Input Set : A:\5.1277.1.txt

Output Set: N:\CRF4\10172005\J552061.raw

272	225	230	235	240
274	Arg Tyr Cys Met Glu Arg Ala Ala Ala His Cys Ala His Val Phe Thr			
275	245	250	255	
277	Thr Val Ser Gln Ile Thr Ala Ile Glu Ala Gln His Leu Leu Lys Arg			
278	260	265	270	
280	Lys Pro Asp Ile Val Thr Pro Asn Gly Leu Asn Val Lys Lys Phe Ser			
281	275	280	285	
283	Ala Met His Glu Phe Gln Asn Leu His Ala Gln Ser Lys Ala Arg Ile			
284	290	295	300	
286	Gln Glu Phe Val Arg Gly His Phe Tyr Gly His Leu Asp Phe Asn Leu			
287	305	310	315	320
289	Asp Lys Thr Leu Tyr Phe Phe Ile Ala Gly Arg Tyr Glu Phe Ser Asn			
290	325	330	335	
292	Lys Gly Ala Asp Val Phe Leu Glu Ala Leu Ala Arg Leu Asn Tyr Leu			
293	340	345	350	
295	Leu Arg Val Asn Gly Ser Glu Gln Thr Val Val Ala Phe Phe Ile Met			
296	355	360	365	
298	Pro Ala Arg Thr Asn Asn Phe Asn Val Glu Thr Leu Lys Gly Gln Ala			
299	370	375	380	
301	Val Arg Lys Gln Leu Trp Asp Thr Ala Asn Thr Val Lys Glu Lys Phe			
302	385	390	395	400
304	Gly Arg Lys Leu Tyr Glu Ser Leu Leu Val Gly Ser Leu Pro Asp Met			
305	405	410	415	
307	Asn Lys Met Leu Asp Lys Glu Asp Phe Thr Met Met Lys Arg Ala Ile			
308	420	425	430	
310	Phe Ala Thr Gln Arg Gln Ser Phe Pro Pro Val Cys Thr His Asn Met			
311	435	440	445	
313	Leu Asp Asp Ser Ser Asp Pro Ile Leu Thr Thr Ile Arg Arg Ile Gly			
314	450	455	460	
316	Leu Phe Asn Ser Ser Ala Asp Arg Val Lys Val Ile Phe His Pro Glu			
317	465	470	475	480
319	Phe Leu Ser Ser Thr Ser Pro Leu Leu Pro Val Asp Tyr Glu Glu Phe			
320	485	490	495	
322	Val Arg Gly Cys His Leu Gly Val Phe Pro Ser Tyr Tyr Glu Pro Trp			
323	500	505	510	
325	Gly Tyr Thr Pro Ala Glu Cys Thr Val Met Gly Ile Pro Ser Ile Ser			
326	515	520	525	
328	Thr Asn Leu Ser Gly Phe Gly Cys Phe Met Glu Glu His Ile Ala Asp			
329	530	535	540	
331	Pro Ser Ala Tyr Gly Ile Tyr Ile Leu Asp Arg Arg Phe Arg Ser Leu			
332	545	550	555	560
334	Asp Asp Ser Cys Ser Gln Leu Thr Ser Phe Leu Tyr Ser Phe Cys Gln			
335	565	570	575	
337	Gln Ser Arg Arg Gln Arg Ile Ile Gln Arg Asn Arg Thr Glu Arg Leu			
338	580	585	590	
340	Ser Asp Leu Leu Asp Trp Lys Tyr Leu Gly Arg Tyr Tyr Met Ser Ala			
341	595	600	605	
343	Arg His Met Ala Leu Ser Lys Ala Phe Pro Glu His Phe Thr Tyr Glu			
344	610	615	620	

VERIFICATION SUMMARY

PATENT APPLICATION: US/10/552,061

DATE: 10/17/2005

TIME: 10:57:44

Input Set : A:\5.1277.1.txt

Output Set: N:\CRF4\10172005\J552061.raw

L:9 M:270 C: Current Application Number differs, Replaced Application Number

L:10 M:271 C: Current Filing Date differs, Replaced Current Filing Date